A NEW GENUS AND SPECIES OF CYLAPINAE FROM PANAMÁ (HEMIPTERA: MIRIDAE)

JON L. HERRING

Systematic Entomology Laboratory, IIBIII, Agr. Res. Serv., USDA¹

ABSTRACT—A new genus and species, **Trynocoris lawrencei**, are described from Barro Colorado Island, Canal Zone, Panamá. Both adults and nymphs were taken from shelf fungi where they were apparently feeding on the larvae of ciid beetles belonging to the genera, *Ceracis* and *Cis*.

Recently, Dr. John F. Lawrence sent me a remarkable new species belonging to an undescribed genus of Miridae from Barro Colorado Island, Panamá, which apparently feeds on Ciidae larvae in fungi growing on trees in the forest. Specimens were taken from approximately a dozen species of fungi belonging to nine or more genera. Since nymphs were taken in several cases, it is probable that the species feeds and completes its life cycle in fungus. The suspected hosts are undescribed species of ciids of the genera *Ceracis* and *Cis*. The present paper has been written to supply a name for Dr. Lawrence's work on the biology and systematics of these tree-fungus beetles.

At first, this bug did not appear to belong to the family Miridae because of its two-segmented tarsi, elongate head with foliaceous antennal segments, very long rostrum, very small cuneus, atypical embolium, and supernumerary veins in the membrane below the basal cell. Although aberrant, this genus belongs in the Cylapinae, tribe Fulviini.

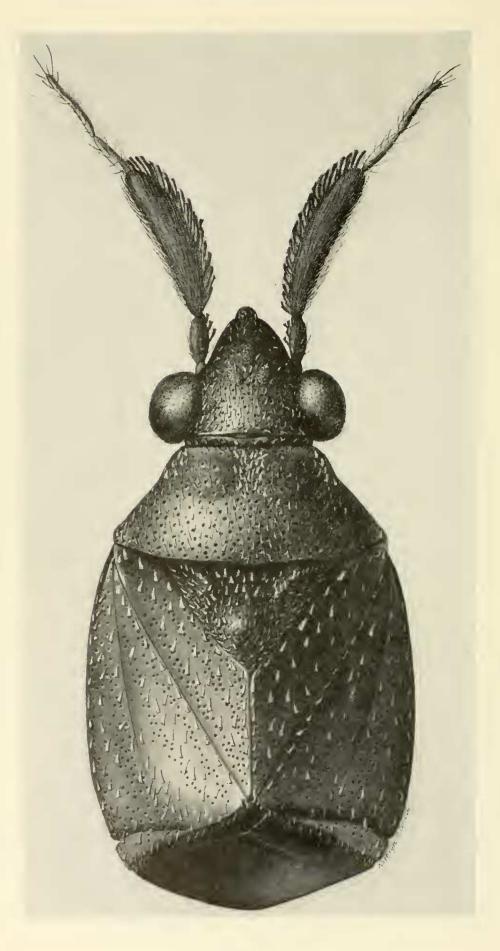
Trynocoris Herring, new genus

Characterized by 2-segmented tarsi, foliaceous 2nd antennal segment, structure of cuneus and embolium, length of rostrum, and presence of cuneate scales.

Head somewhat declivent, about $\frac{3}{5}$ as long as broad, densely punctured, vertex with 3, low, oval prominences, separated centrally and bounded laterally by channels wich are obscured by cuneate white scales intermixed with abundant fine white hairs; eyes each equal to $\frac{1}{2}$ width of vertex, contiguous to collar; antennae inserted approximately 1 peduncle width in front of eyes, short, segment II foliaceous, with prominent setae and cuneate dark scales, III and IV very short; bucculae prominent, just reaching anterior margin of eye; rostrum very long, surpassing apex of abdomen in male, somewhat shorter in female.

Pronotum of the Fulviini type, collar present, narrow, calli not fused or strongly convex, poorly delimited but discrete due to outlining by cuneate scales; lateral margins of pronotum carinate, dorsal surface deeply, densely punctured; scutellum tumid, mesoscutum broadly exposed, both punctate.

¹ Mail address: c/o U.S. National Museum, Washington, D.C. 20560.



Hemelytra punctate, dull, costal area wide, especially near apex where it is equal in width to corium, costal vein absent, clavus thickly punctured, corium and embolium less so, cuncus quite short, its fracture deep. Single cell of membrane with several spurious veins leaving the margin and inner angle of cell. Apex of hemelytra at level of cuncal fracture bent abruptly downward at an angle of $45^{\circ}-90^{\circ}$.

Legs rather short, anterior coxae much longer and stouter than others, tibiae with spines, typical hairs and rows of minute tubercles, tarsi 2-segmented, the 2nd segment very long.

Ostiole with a well-defined peritreme.

Type-species: Trynocoris lawrencei, n. sp.

Trynocoris runs to couplet 19 in Carvalho's (1955) key to the Fulviini genera of the world but does not fit either choice in that couplet as the frons is not depressed but striolated and punctate, and the cuneus is present. In addition, *Trynocoris* differs from all the genera following couplet 19 by its foliaceous second antennal segment and the vestiture of cuneate scales.

Trynocoris lawrencei Herring, new species

fig. 1

A very small, dark-brown species with distinctive cuneate scales and decumbent hairs, scales forming definite patterns on pronotum and scutellum.

Male: Length 2.1 mm., width 0.95 mm. *Head length*: Width², 17:24, vertex 11. *Antennae*: Segment I almost reaching apex of head, II foliaceous, as long as head, III and IV very short, proportion of segments I–IV, 7:22:8:11. *Pronotum*: Median length to width at base 19:35. *Rostrum*: Length 1.7 mm.

Color: Chocolate brown; last 2 segments of antennae, all tibiae and tarsi, and apices of femora, pale yellow; ill-defined bright-red ring just before apices of femora, some reddish coloration on coxae and trochanters; rostrum yellow with reddish to reddish-brown band at base, fuscous band at middle and another at apex.

Vestiture: Dorsal surface except membrane covered with mixture of cuneate scales and fine decumbent hairs, scales confined mainly to 1st 2 antennal segments, anterior $\frac{1}{2}$ of pronotum around calli, 3 triangular patches on scutellum, and in rows on hemelytra, those on antennae black, those on remainder of surface ivory white to golden; scales also present on sides of pronotum and on pleura.

Other morphological characters as given for genus.

Male genitalia: Left clasper bluntly rounded at apex, right one spatulate.

Female: Larger and more robust than male. Length 2.6 mm, width 1.3 mm.

Holotype: d (USNM 72986), Barro Colorado Island, Canal Zone,

Fig. 1. Trynocoris lawrencei.

² The following measurements are in units, unless stated otherwise. 39 units = 1 mm.

Rep. Panamá, Feb. 6, 1968, ex *Polyporus caperatus*, J. F. Lawrence, Collector. Allotype: \Im , same data except, July 3, 1969. ex *Coriolopsis crocata*. Paratypes: 10 & &, 8 \Im , same locality and collector, March 1967 to August 1969. All in USNM.

Reference

Carvalho, J. C. M. 1955. Keys to the genera of Miridae of the World (Hemiptera). Bol. Mus. Paraense Emilio Goeldi. 11(2):1-151.

BOOK NOTICES

Looking at Animals. A Zoologist in Africa. 1975. By Hugh B. Cott. 221 pp., 62 pages of photos, some in color; numerous pen and ink sketches. Charles Scribner's Sons, New York. \$14.95.

The author of this fine book is noted as a teacher in England and as a zoologist-explorer in many parts of the world. He has often accompanied tours to East Africa as a guest lecturer. His outstanding 1940 book, "Adaptive Coloration in Animals", established his stature in general natural history, behavior, and ecology.

Dr. Cott gives us interesting information in a most readable text, and the personally contributed illustrations (photographs and sketches) further make the book a splendid gift for anyone with either direct or peripheral interest in the subject. In the chapter on Advertising Coloration and Display numerous insects are discussed and illustrated.—A.B.G.

Insect Hormones. Fourth (second English) ed. 1975. By V. J. A. Novák. 600 pp., 37 pls., 73 figs. Halsted Press, 605 Third Ave., New York, N.Y. 10016. \$49.50.

Because of the current importance of hormones, including the wide attention paid to juvenile hormones as possible control substances in applied entomology, this extensive review volume is timely. In addition to the comprehensive review aspects of the book, it also introduces the subject in a readable manner, with basic information on techniques and methods employed in research. A systematic study of hormones has been occurring only for a relatively short while and the 114 pages of references are chosen and arranged here so as not to duplicate many in earlier editions, also to emphasize papers poorly known to many western readers of this English edition. Since 1958, when the first (German) edition was ready for publication (it appeared in 1959), references on hormones have grown from 1500 to over 6,000.

The author, now head of Insect Physiology in the Entomological Institute, Czechoslovak Academy of Sciences, Prague, began his study of hormones in 1948–49 at Cambridge University under the guidance of a prominent researcher in this field, Sir Vincent Wigglesworth.—A.B.G.

94